

December 19, 1988

Hammons Tower Suites, Inc.
901 St. Louis
Springfield, Missouri 65806

Dear Sirs:

On November 16, 1988 this office received a complaint through the Missouri Department of Natural Resources that a green colored discharge was observed from your property. The complaint was investigated and Hammons Tower building maintenance personnel confirmed the source as their draining the cooling tower. The cooling tower water exited the building from a roof leader located on the building's southeast corner, flowed across the parking lot, and left your property near the intersection of St. Louis and Hammons Parkway.

A sample of the discharge was taken where it exited your property with the following pollutant concentrations in milligrams per liter reported by the laboratory:

copper	0.212 mg/l
chromium	0.0127 mg/l
zinc	0.919 mg/l

The pollutants noted above and others not tested for are responsible for the desired effects in your cooling tower water. Those effects include the inhibition of biological growth and prevention of scale. Unfortunately, when discharged to the stream, it may have equally disastrous results on aquatic life.

The State of Missouri Water Quality Standards set the following criteria for the protection of aquatic life for the three pollutants noted above:

copper	0.020 mg/l
chromium	0.050 mg/l
zinc	0.100 mg/l

The Springfield City Code Section 30-11: Waste Disposal states "It shall be unlawful for any person to place, deposit, cause, or permit to be deposited in any unsanitary manner upon public or private property within the City or in any area under the jurisdiction of the City, any

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domestic waste, garbage, pollutant, or other objectionable waste." Section 30-12: Wastewater Discharge also states "(b) It shall be unlawful to discharge into Waters of the State within the City or in any area where there is an availability of sewers in any jurisdiction with which the City has an interjurisdictional sewage treatment agreement, any wastewater or pollutant, except where suitable treatment has been provided and approved by the Director and the State of Missouri."

As we discussed with your maintenance department, the discharge of chemically treated cooling tower water has a potential for severe distress to aquatic life. The disposal of cooling tower water is permissible in the sanitary sewer where it is treated to remove the pollutants so they are not a threat to the quality of the receiving stream.

If you have any questions please do not hesitate to contact this office.

Yours truly,



Stephen D. Short
Water Pollution Control Inspector II
Surveillance & Enforcement

SDS:js

cc: Robert Schaefer, P.E., Supt. of Sanitary Services
J.R. Lyman, Sewer Surveillance & Billing Supv.
Tracy McCracken, Mo. D.N.R.
file (2)

SOUTHWEST WASTEWATER PLANT LABORATORY, SPRINGFIELD, MISSOURI

DEC 15 1988

ANALYSIS DATA REPORT

SAMPLE NUMBER:	4568	TIME SAMPLER IN:	04:00:00
SAMPLE NAME:	HAMMON'S TOWER	TIME SAMPLER OUT:	
DATE OF SAMPLE:	11/16/88	METER START:	
DATE SUBMITTED:	11/17/88	METER END:	
TIME SUBMITTED:	13:34:44	TEMP.	DEG/C:
SAMPLE TYPE:	GRAB	DIS. OXY.	MG/L:
SUBMITTED BY:	SHORT	FLOW:	MGD:
SET UP BY:		VOLUME:	
REMOVED BY:		DEPTH:	

COMMENTS: MISSOURI D.N.R. COMPLAINING - TALKED TO DON.

CONVENTIONAL PARAMETERS		TOTAL METALS UG/L	DISSOLVED METALS UG/L	TOTAL RECOVERABLE METALS UG/L
BOD-5	MG/L:	CU:	212	
PH	STD. UNITS:	CR:	12.7	
NFR	MG/L:	ZN:	919	
COD	MG/L:	CD:		
TOC	MG/L:	PB:		
NH3-N	MG/L:	NI:		
NO3-N	MG/L:	AG:		
NO2-N	MG/L:	FE:		
NO3+NO2-N	MG/L:	HG:		
CHLORIDE	MG/L:	MN:		
SULFATE	MG/L:	BA:		
TKN	MG/L:	SE:		
O-PO4-P	MG/L:	AS:		
O-PO4-P DIS	MG/L:	AL:		
TP	MG/L:	SB:		
CN TOTAL	UG/L:	B:		
CN AMMENA	MG/L:	CO:		
TDS	MG/L:	TI:		
PHENOLICS	UG/L:	CR+6:		
OIL&GREASE	MG/L:	BE:		
MBAS	MG/L:	TL:		
TURBIDITY	NTU:	K:		
CONDUCT	UMOS/CM:	NA:		
TOTAL COLI/100ML:				
FECAL COLI/100ML:				
FEDA STREP/100ML:				

901 St. Louis

CITY OF SPRINGFIELD
WATER POLLUTION CONTROL
MONITORING AND ANALYSES REPORT

DEC 15 1988

SAMPLE NAME Hammock Tower TIME SAMPLER IN 4:00:00
 SAMPLE DATE 11/16/88 TIME SAMPLER OUT
 SAMPLE NUMBER 4568 METER END
 SAMPLE TYPE Grab METER START
 SET UP BY S. Short VOLUME
 REMOVED BY DEPTH
 COMMENTS
No. D.N.R. complaint - TACKED TO
"Don"

CONVENTIONAL PARAMETERS			METALS ANALYSES TOTAL DISLV RECOV			OTHER PARAMETERS
BOD-5	MG/L	CU	<input checked="" type="checkbox"/>			VOLATILE ORGANICS
PH	STD. UNITS	CR	<input checked="" type="checkbox"/>			BASE NEUTRALS
NFR	MG/L	ZN	<input checked="" type="checkbox"/>			ACID EXTRACTIBLES
COD	MG/L	CD				PESTICIDES
TOC	MG/L	PB				T.C.D.D.
NH3-N	MG/L	NI				ASBESTOS
NO3-N	MG/L	AG				TOTAL P.P.
NO2-N	MG/L	FE				I.C.R.T.
NO3+NO2-N	MG/L	HG				T.C.L.P.
CHLORIDE	MG/L	MN				T.T.O.
SULFATE	MG/L	BA				
TKN	MG/L	SE				
O-PO4-P	MG/L	AS				
O-PO4-P D	MG/L	AL				
TP	MG/L	SB				
CN TOTAL	MG/L	B				
CN AMENBL	MG/L	CO				
TDS	MG/L	TI				
PHENOLICS	MG/L	CR+6				
OIL&GREASE	MG/L	BE				
MBAS	MG/L	TL				
TURBIDITY	MG/L	K				
CONDCT	UMOS/CM	NA				
TOT COLI/100ML						
FEC COLI/100ML						
FEC STRP/100ML						

CHAIN OF CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE	TIME
<u>Conner</u> SEALED <input type="checkbox"/> SHIPPED <input type="checkbox"/>	<u>Brown</u> SEALED <input type="checkbox"/>	<u>11-17-88</u>	<u>10:55</u>
SEALED <input type="checkbox"/> SHIPPED <input type="checkbox"/>	SEALED <input type="checkbox"/>		